

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY
(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference P16559PC/MH	FOR FURTHER ACTION See Form PCT/IPEA/416	
International application No. PCT/SE2002/001672	International filing date (day/month/year) 16-09-2002	Priority date (day/month/year) ---
International Patent Classification (IPC) or national classification and IPC G06F 13/14, H04L 29/08, H04L 12/56		
Applicant TELEFONAKTIEBOLAGET L M ERICSSON (PUBL) ET AL		

- This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.
- This REPORT consists of a total of 4 sheets, including this cover sheet.
- This report is also accompanied by ANNEXES, comprising:
 - ☐ (sent to the applicant and to the International Bureau) a total of _____ sheets, as follows:
 - ☐ sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).
 - ☐ sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.
 - ☐ (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) _____, containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).

- This report contains indications relating to the following items:

<input checked="" type="checkbox"/>	Box No. I	Basis of the report
<input type="checkbox"/>	Box No. II	Priority
<input type="checkbox"/>	Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
<input type="checkbox"/>	Box No. IV	Lack of unity of invention
<input checked="" type="checkbox"/>	Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
<input type="checkbox"/>	Box No. VI	Certain documents cited
<input type="checkbox"/>	Box No. VII	Certain defects in the international application
<input type="checkbox"/>	Box No. VIII	Certain observations on the international application

Date of submission of the demand 16-02-2002	Date of completion of this report 31-08-2004
Name and mailing address of the IPEA/SE Patent- och registreringsverket Box 5055 S-102 42 STOCKHOLM Facsimile No. +46 8 667 72 88	Authorized officer Lisbeth Andersson /LR Telephone No. +46 8 782 25 00

Box No. I Basis of the report

1. With regard to the **language**, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.

- ☐ This report is based on a translation from the original language into the following language _____, which is the language of a translation furnished for the purposes of:
- ☐ international search (under Rules 12.3 and 23.1(b))
 - ☐ publication of the international application (under Rule 12.4)
 - ☐ international preliminary examination (under Rules 55.2 and/or 55.3)

2. With regard to the **elements** of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:

- ☒ the international application as originally filed/furnished
- ☐ the description:
- pages _____ as originally filed/furnished
- pages* _____ received by this Authority on _____
- pages* _____ received by this Authority on _____
- ☐ the claims:
- pages _____ as originally filed/furnished
- pages* _____ as amended (together with any statement) under Article 19
- pages* _____ received by this Authority on _____
- pages* _____ received by this Authority on _____
- ☐ the drawings:
- pages _____ as originally filed/furnished
- pages* _____ received by this Authority on _____
- pages* _____ received by this Authority on _____
- ☐ a sequence listing and/or any related table(s) – see Supplemental Box Relating to Sequence Listing.

3. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages _____
- ☐ the claims, Nos. _____
- ☐ the drawings, sheets/figs _____
- ☐ the sequence listing (*specify*): _____
- ☐ any table(s) related to the sequence listing (*specify*): _____

4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

- ☐ the description, pages _____
- ☐ the claims, Nos. _____
- ☐ the drawings, sheets/figs _____
- ☐ the sequence listing (*specify*): _____
- ☐ any table(s) related to the sequence listing (*specify*): _____

* If item 4 applies, some or all of those sheets may be marked "superseded."

Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims	<u>4-6, 9, 13, 14</u>	YES
	Claims	<u>1-3, 7, 8, 10-12, 15</u>	NO
Inventive step (IS)	Claims		YES
	Claims	<u>1-15</u>	NO
Industrial applicability (IA)	Claims	<u>1-15</u>	YES
	Claims		NO

2. Citations and explanations (Rule 70.7)

The invention relates to a method and arrangement for controlling data flow on a data bus. The object of the invention is to solve the problem of reception problem at a receiver caused by buffers that are full. When the receiver detects that the buffers of the receiver are full, the receiver transmits a control data sequence to all available transmitters. The transmitters alters their transmission mode from "transmission" to "blocking transmission" when they receive the control data sequence from the receiver.

The following documents are cited in the International Search Report:

D1: EP 1014626 A2
D2: US 5878279 A
D3: EP 0602806 A2
D4: US 5007051 A
D5: US 4261035 A

Document D1, which is considered to represent the most relevant prior art, discloses a method, apparatus and network device for controlling the flow of network data arranged in frames and for minimizing congestion, such as in the receive port of an HDLC controller. A status error indicator I generated within a receive FIFO memory, which is considered equal to the receiver buffer of the invention, indicative of a frame overflow within the receive FIFO memory. The status error indicator can be read by a communications processor and an early congestion interrupt, which is considered equal to the control data sequence of the invention, can be generated. The result of the early congestion interrupt signal is that network burst size is changed or a modification of time-slice of the active processes. Hence the transmission mode is changed due to the early congest interrupt signal.
(see figure 26, sections 0129-0134)

.../...

Supplemental Box

In case the space in any of the preceding boxes is not sufficient.

Continuation of: BOX V

The invention according to claims 1-3 and 7-8, 10-12, 15 is previously known from document D1 and thus not novel.

The invention according to claims 4-6 differs from the method and arrangement of D1 since the invention state that the receiver comprises the following parts: processing unit, memory unit, bus driver and logical unit. This is merely one of several straightforward ways to facilitate a receiver from which the skilled person would select a way. Hence, the invention according to claims 4-6 is not considered to involve an inventive step.

In claims 9 and 13-14 slight constructional variations are suggested that are obvious to a person skilled in the art, especially as the advantages thus achieved can be readily contemplated in advance. Consequently, the invention claimed in claims 9 and 13-14 does not involve an inventive step.

Documents D2-D5 represent the general state of the art.